

Exhibit 1  
USSN 10/532,067  
GRUE-004

nt 3553-5280 of X02919

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3553          ttgaattc acttaataac ccaaagcatg tattacaaaa cttttctggt
3601 ttctttaaca aaaaaaaga agctgaaata gcagaaactg aaacacatt agaaaacaca
3661 aaaatattat tgaacatta taaaggactt gttaaatatt ataattgtga atcatctcca
3721 ttaaaaactt taagtgaaga atcaattcaa acagaagata attatgccag tttagaaaaac
3781 tttaaagtat taagtaaaat agaaggaaaa ttaaaggata atttaaaatt agaaaagaaa
3841 aaattatcat acttatcaag tggattacat catttaattg ctgaattaaa agaagtaata
3901 aaaaataaaa attatacagc taattctcca agtgaaaata atacggatgt taacaatgca
3961 ttagaattct acaaaaaatt tctcccagaa ggaacagatg ttgcaacagt tgtaagtga
4021 agtggatccg acacattaga acaaagtcaa ccaaagaaac cagcatcaac tcatgtagga
4081 cgagatctca acacaataac aacatcacaa aatgtcgatg atgaagtaga tgacgtaatc
4141 atagtaccta tatttgga atccgaagaa gattatgatg atttaggaca agtagtaaca
4201 ggagaagcag taactccttc cgttaattgat aacatacttt ctaaaattga aaatgaatat
4261 gaggttttat atttaaaacc tttagcaggt gtttatagaa gttaaaaaa acaattagaa
4321 aataacgtta tgacatttaa tgttaattgt aaggatattt taaattcacg atttaataaa
4381 cgtgaaaatt tcaaaaatgt tttagaatca gatttaattc catataaaga ttaacatca
4441 agtaattatg ttgtcaaaga tccatataaa tttottaata aagaaaaag agataaattc
4501 ttaagcagtt ataattatat taaggattca atagatacgg atataaattt tgcaaatgat
4561 gttcttgat attataaaat attatccgaa aaatataaat cagatttaga ttcaattaaa
4621 aaatatatca acgacaaaca aggtgaaaat gagaataacc ttcccttttt aaacaatatt
4681 gagaccttat ataaacacgt taatgataaa attgatttat ttgtaattca tttagaagca
4741 aaagttctaa attatacata tgagaaatca aacgtagaag ttaaaataaa agaacttaat
4801 tacttaaaaa caattcaaga caaattggca gattttaaaa aaaataacaa ttctgttga
4861 attgtctgatt tatcaacaga ttataacctt aataacttat tgacaaagtt ccttagtaca
4921 ggtatggttt ttgaaaatct tgctaaaacc gttttatcta atttacttga tggaaacttg
4981 caaggtatgt taaacatttc acaacaccaa tgcgtaaaaa aacaatgtcc acaaattct
5041 ggatgtttca gacatttaga tgaagagaga gaatgtaaat gtttattaaa ttacaacaaa
5101 gaaggtgata aatgtgttga aaatccaaat cctacttgta acgaaaataa tgggtggatgt
5161 gatgcagatg ccaaattgtac cgaagaagat tcaggtagca acggaagaa aatcacatgt
5221 gaatgtacta aacctgattc ttatccactt ttcgatggta tttctcgag ttccctaac
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## GRUE-004

MKIIFPLCSFLFFIINTQCVTHESYQELVKKLEALEADVLGTYS  
 LFQKEKMWLNBTGGTAVTSTPGSGKSVASGGSGGVSASGGSVASGGSVAS  
 GSGSNRRTPNDNSDDAKSYADLKHVRVNYLITIKELKYPQLFDLTHMLTLCDN  
 IHGFGYLDIGBYEINBLYKLNFYDLIRAKINDVCANDYQIPFNKLTRANELVDL  
 LKIFVGRKPLDINIKDINVELMDEYKNNKTIENINELIEESKTKDKNNKATEEEKK  
 KLYQAQYDLSTYNKQLEEAHNLISVLEKRIDITLKKNEINIKELDKINEKNPPANGS  
 NTPNTLTDKNKKIEEHEKEIKETAKTIFNDISLFTDPLEBYLRKNKNIDISAKV  
 ETKESTENEPYNGVTPPLSYNDINNALNELNSFGDLINPDPYKEPSKNITDNERK  
 INEIKIEKIKIEKKIEBDDKSYSDSKSNIDITKEYEKLNEIYDSKFNNDILTN  
 FKFNEMGRKYSYKVEKLTHNTFASYSKSNHKLTKALKWMEYDSLRNVVVKELKY  
 YKNLISLKEINLETILNKKDEQLPEKKITKENDKPKDEKLEVSDFVQKQVLL  
 MNKIDELKTKQLILKNVELKHNHVPNSYQENKQEPYLVLKKEIDKLKVMFKVE  
 SLINEEKNKIKTEGSDNSEPTEGETGQATTKPGQAGSALGDSVQAQEQKQA  
 QPPVPVPVEAKAQVTPPAVNNKTEWSKLDYLEKLYEPLNTSYCHKYILVSGST  
 MNEKILKYKIKTEEESKLSGCCDPLDLFNQINNPNVWMSFDSLNNLSQLFMEIYE  
 MNKVCNLYKLKDNCKIKNLEAAKKSVTBKLTSSSMQPLSLTPDKQKPEASNDTS  
 HSTNLNKKLKFENLISLGNKNYISQELTGKSNSENYEKLKDSDFVNESTFWVK  
 SKADDINSLNDESKRKKLEEDINKLKTQLSFDLYNKYKLERLFDKKTKVGKYM  
 QIKKLTILKEQLESKINSLNPNKHVLQNFVSFFNKKKEABEIAETENTLENTKILKH  
 YKGLVKYNYGSESPKLTLSEESIQTEDNYASLENFVILSKLEGLKDNINLEKKLSYL  
 SSGLEHLIAELKEVIKNKNTGNSPENNDVNNALESYKFLPEGTDVATVVSSEGS  
 DTLHQSQPKASTHWGAEINTTSSQNVDDVEDDVIIVPFIGESEEDYVVDQVGTG  
 EAVTPSVINDILSKINEYEYVLTKLPGVLRSLKQLENNVNTFNNDKILNSRNF  
 KRENFKNVLSDLPYKDLTSSNYVVKDPYKFLNKEKRDKFLSSYNIKDSIDTDINF  
 ANDVLGYKYLKSEKYSDLSIKKIYNDKQGENERYLPFLNNIETPLYTVNDKIDLFV  
 IHLEAKVLNNTYKSNVEVYIKELNLYKTIQKDLADFKNNNFVGIAIDSTOYNHNNL  
 LTKFLTLGMVFNELAKTVLSNLLDGNLQGMNLISHQCVKQKQPNQSGCFRHLDEREE  
 CKCSLLNGYQGDKCVENPNTCPNENNGGDDADAKCTEEDSGSNGKKTCECTKPDSPY  
 LPDFGFCSSNLPNPLFTLNLILYISFI

**Bold** = C-terminal fragment used in Yang (575 amino acids; amino acids 1047-1621; encoded by nt 3553-5280 of X02919)